



SSG Series

Features

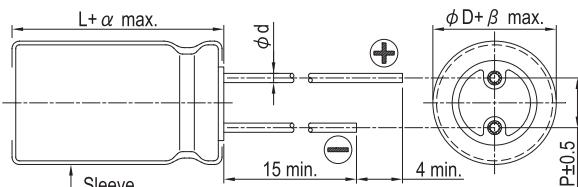
- 105°C, 1,000 hours assured
- Standard micro miniature size with 5mm height
- RoHS compliant

SSG
M105°C
H136

Specifications

| Items | Performance | | | | | | | | | | | | | | |
|--|--|---|------|------|------|--------|------|------|--|--|--|--|--|--|--|
| Category Temperature Range | -40°C ~ +105°C | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (at 120 Hz, 20°C) | | | | | | | | | | | | | | |
| Leakage Current (at 20°C) | I = 0.01CV or 3 (µA) whichever is greater (after 2 minutes) Where, C = rated capacitance in µF, V = rated DC working voltage in V | | | | | | | | | | | | | | |
| Tanδ (at 120 Hz, 20°C) | Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | |
| | Tanδ (max) | 0.35 | 0.25 | 0.20 | 0.17 | 0.15 | 0.13 | 0.10 | | | | | | | |
| Low Temperature Characteristics (at 120 Hz) | Impedance ratio shall not exceed the values given in the table below. | | | | | | | | | | | | | | |
| | Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | |
| | Impedance Ratio | Z(-25°C)/Z(+20°C) | 7 | 6 | 4 | 3 | 2 | 2 | | | | | | | |
| | | Z(-40°C)/Z(+20°C) | 15 | 12 | 8 | 6 | 4 | 4 | | | | | | | |
| Endurance | Test Time | 1,000 Hrs | | | | | | | | | | | | | |
| | Capacitance Change | Within ±30% of initial value for 4 ~ 6.3V; Within ±25% of initial value for 10 ~ 50V | | | | | | | | | | | | | |
| | Tanδ | Less than 200% of specified value | | | | | | | | | | | | | |
| | Leakage Current | Within specified value | | | | | | | | | | | | | |
| * The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 1,000 hours at 105°C. | | | | | | | | | | | | | | | |
| Shelf Life Test | Test time: 500 hours; other items are the same as those for the Endurance. | | | | | | | | | | | | | | |
| Ripple Current and Frequency Multipliers | Freq.(Hz) | 60 (50) | 120 | 500 | 1k | 10k up | | | | | | | | | |
| | Cap.(µF) | | | | | | | | | | | | | | |
| | ≤ 47 | 0.75 | 1.00 | 1.15 | 1.34 | 1.50 | | | | | | | | | |
| | 100 ~ 220 | 0.80 | 1.00 | 1.08 | 1.20 | 1.30 | | | | | | | | | |

Diagram of Dimensions



| Lead Spacing and Diameter | | | | Unit: mm |
|---------------------------|-----|------|-----|----------|
| φD | 4 | 5 | 6.3 | |
| P | 1.5 | 2.0 | 2.5 | |
| φd | | 0.45 | | |
| α | | 1.0 | | |
| β | | 0.5 | | |

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/rms at 120 Hz, 105°C

Dimension and Permissible Ripple Current

| Rated Volt. (Vdc) | Cap. (µF) | 4V (0G) | | 6.3V (0J) | | 10V (1A) | | 16V (1C) | | 25V (1E) | | 35V (1V) | | 50V (1H) | |
|-------------------|-----------|----------|------|-----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|
| | | Contents | φD×L | mA | φD×L | mA | φD×L | mA | φD×L | mA | φD×L | mA | φD×L | mA | φD×L |
| 1 | 010 | | | | | | | | | | | | | 4×5 | 7 |
| 2.2 | 2R2 | | | | | | | | | | | | | 4×5 | 8.7 |
| 3.3 | 3R3 | | | | | | | | | 4×5 | 11 | 4×5 | 12 | 4×5 | 13 |
| 4.7 | 4R7 | | | | | | | 4×5 | 14 | 4×5 | 15 | 4×5 | 17 | 5×5 | 20 |
| 10 | 100 | | | | | 4×5 | 14 | 4×5 | 23 | 5×5 | 27 | 5×5 | 27 | 6.3×5 | 31 |
| 22 | 220 | | | 4×5 | 21 | 5×5 | 27 | 5×5 | 30 | 6.3×5 | 42 | 6.3×5 | 46 | 6.3×5 | 46 |
| 33 | 330 | 4×5 | 27 | 5×5 | 30 | 5×5 | 34 | 6.3×5 | 40 | 6.3×5 | 52 | 6.3×5 | 52 | | |
| 47 | 470 | 4×5 | 34 | 5×5 | 36 | 6.3×5 | 43 | 6.3×5 | 48 | 6.3×5 | 58 | | | | |
| 100 | 101 | 5×5 | 50 | 6.3×5 | 56 | 6.3×5 | 70 | | | | | | | | |
| 220 | 221 | 6.3×5 | 74 | | | | | | | | | | | | |

Part Numbering System

| | | | | | | | |
|-------------|-------------|-----------------------|---------------|--------------------------------|-------------|-------------|-----------------|
| SSG Series | 100µF | ±20% | 6.3V | Bulk Package | Gas Type | 6.3φ×5L | General Purpose |
| SSG | 101 | M | 0J | BK | - | 0605 | |
| Series Name | Capacitance | Capacitance Tolerance | Rated Voltage | Lead Configuration and Package | Rubber Type | Case Size | Application |

Note: For more details, please refer to "Part Numbering System - Radial Type" on page 139.